GPSMAP® 500 series

owner's manual

GARMIN™

© 2007 Garmin Ltd. or its subsidiaries

Garmin International, Inc.
1200 East 151st Street,
Olathe, Kansas 66062, USA
Tel. (913) 397.8200 or (800) 800.1020
Fax (913) 397.8282

Garmin (Europe) Ltd.
Liberty House
Hounsdown Business Park,
Southampton, Hampshire, SO40 9RB UK
Tel. +44 (0) 870.8501241 (outside the UK)
0808 2380000 (within the UK)
Fax +44 (0) 870.8501251

Garmin Corporation
No. 68, Jangshu 2nd Road,
Shijr, Taipei County, Taiwan
Tel. 886/2.2642.9199
Fax 886/2.2642.9099

All rights reserved. Except as expressly provided herein, no part of this manual may be reproduced, copied, transmitted, disseminated, downloaded or stored in any storage medium, for any purpose without the express prior written consent of Garmin. Garmin hereby grants permission to download a single copy of this manual onto a hard drive or other electronic storage medium to be viewed and to print one copy of this manual or of any revision hereto, provided that such electronic or printed copy of this manual must contain the complete text of this copyright notice and provided further that any unauthorized commercial distribution of this manual or any revision hereto is strictly prohibited.

Information in this document is subject to change without notice. Garmin reserves the right to change or improve its products and to make changes in the content without obligation to notify any person or organization of such changes or improvements. Visit the Garmin Web site (www.garmin.com) for current updates and supplemental information concerning the use and operation of this and other Garmin products.

Garmin® is a trademark of Garmin Ltd. or its subsidiaries, registered in the USA and other countries. GPSMAP®, AutoLocate®, BlueChart®, BlueChart® g2 Vision™, TracBack®, BlueChart®, MapSource®, and Ultrascroll™ are trademarks of Garmin Ltd. or its subsidiaries. These trademarks may not be used without the express permission of Garmin. XM WX Weather and XM Radio are trademarks of XM Satellite Radio, Inc.

February 2007 Part Number 190-00758-00 Rev. B Printed in Taiwan

INTRODUCTION

This manual includes information for the following products:

GPSMAP® 520/520s	GPSMAP® 525/525s
GPSMAP® 530/530s	GPSMAP® 535/535s
GPSMAP® 540/540s	GPSMAP® 545/545s
GPSMAP® 550/550s	GPSMAP® 555/555s

Tips and Shortcuts

- Press **HOME** from any screen to return to the Home screen.
- Press **MENU** from any of the main screens to access advanced settings.
- Press and release the **POWER** key to adjust the display settings.

Manual Conventions

In this manual, when you are instructed to select an item, small arrows (>) appear in the text. They indicate that you should highlight a series of items on the screen using the **ROCKER**, and press the **SELECT** key after each item. For example, if you see "select **Charts** > **Navigation Chart**," you should highlight **Charts**, and press **SELECT**. Then highlight **Navigation Chart**, and press **SELECT** again.

Quick Links

- Turning the Unit On or Off: page 2.
- Acquiring GPS Satellite Signals page 4.
- Inserting and Removing SD Cards: page 5.
- Restoring Factory Settings: page 5.
- Using the Navigation Chart: page 7.
- Changing the Chart Settings: page 16.
- Navigating to a Destination: page 19.
- Creating a Waypoint: page 21.
- Configuring System Settings: page 29.
- Using Sonar: page 35.
- Installing the Unit: page 39.
- Alarms and Messages: page 55.

Table of Contents

Introduction i
- Tips and Shortcuts i
- Manual Conventions i
- Quick Links i
- Warnings iv
- Important Information iv

Getting Started 1
- Unit Overview 1
- Turning the Unit On or Off 2
- Adjusting the Backlight 2
- Using the Keypad 3
- Acquiring GPS Satellite Signals 4
- Using Simulator Mode 4
- Restoring Factory Settings 5
- Viewing System Information 5
- Inserting and Removing SD Cards 5
- Understanding the Home Screen 6

Using Charts 7
- Using the Navigation Chart 7
- Using BlueChart g2 Vision 11
- Using Mariner's Eye 3D 12
- Using Fish Eye 3D 13
- Using Fishing Charts 13
- Enabling High Resolution Satellite Imagery 14
- Viewing Aerial Photos 15
- Viewing Current Station Information 16
- Detailed Road and POI Data 16
- Using Automatic Guidance 16
- Changing the Chart Settings 16
- Using the Chart/Sonar Screen 18

Where To? 19
- Navigating to a Destination 19
- Creating and Using Waypoints 21
- Creating and Using Routes 23

Viewing Information 25
- Viewing Numbers 25
- Viewing Tide Station Information 26
- Viewing Current Information 26
- Viewing Celestial Information 27
- Viewing User Data 27
- Viewing Other Boats 28

Configuring the Unit 29
- Configuring System Settings 29
- Changing Units of Measure 29
- Configuring Communications Settings 30
- Setting Alarms 31
- Configuring My Boat 32
- Configuring Other Boats 34
- Configuring XM Audio 34

Using Sonar 35
- Understanding the Full Screen 35
- Understanding the Flasher 35
- Understanding the Split Freq Screen 36
- Understanding The Split Zoom Screen 36
- Understanding the Temp Log Screen 37
- Setting Up Sonar 37
- Advanced Sonar Settings 38

Installing The Unit 39
- Step 1: Select a Location 39
- Step 2: Mount the Unit 40
- Step 3: Install the Transducer 42
- Step 4: Install the Wiring Harness 48
- Step 5: Test the Installation 51

Appendix 53
- Specifications 53
- Product Registration 54
- Caring for the Unit 54
- Alarms and Messages 55
- Weather Data Warranty 59
- XM Satellite Radio Service Agreement 60
- Software License Agreement 60
- Limited Warranty 61
- FCC Compliance 62
- Industry Canada Compliance 62
- Optional Accessories 62

Index 63

Warnings

Failure to avoid the following potentially hazardous situations could result in an accident or collision resulting in death or serious injury.

- When navigating, carefully compare information displayed on the unit to all available navigation sources, including information from visual sightings, and maps. For safety, always resolve any discrepancies or questions before continuing navigation.
- Use the electronic chart in the unit only to facilitate, not to replace, the use of authorized government charts. Official government charts and notices to mariners contain all information needed to navigate safely.
- Use this unit only as a navigational aid. Do not attempt to use the unit for any purpose requiring precise measurement of direction, distance, location, or topography.

WARNING: This product, its packaging, and its components contain chemicals known to the State of California to cause cancer, birth defects, or reproductive harm. This Notice is provided in accordance with California's Proposition 65. See www.garmin.com/prop65 for more information.

Hg - LAMPS INSIDE THIS PRODUCT CONTAIN MERCURY AND MUST BE RECYCLED OR DISPOSED OF ACCORDING TO LOCAL, STATE, OR FEDERAL LAWS.

For more information go to:
www.garmin.com/aboutGarmin/environment/disposal.jsp.

Important Information

MAP DATA INFORMATION: One of the goals of Garmin is to provide customers with the most complete and accurate cartography that is available to us at a reasonable cost. We use a combination of governmental and private data sources, which we identify in product literature and copyright messages displayed to the consumer. Virtually all data sources contain some inaccurate or incomplete data. In some countries, complete and accurate map information is either not available or is prohibitively expensive.

The **California Electronic Waste Recycling Act of 2003** requires the recycling of certain electronics. For more information on the applicability to this product, see www.erecycle.org.

GETTING STARTED

Unit Overview

GPSMAP 545s shown

Turning the Unit On or Off

Press and hold the **POWER** key until the unit beeps and the Garmin screen appears. When the Warning screen appears, press **SELECT** to open the Home screen.

NOTE: The first time you power on your unit, you must go through a setup sequence. See page 51 for details.

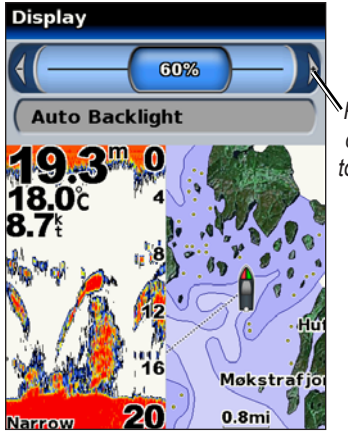
WARNING
All information is presented for reference only. You assume total responsibility and risk associated with using this device.
I Agree
SELECT

Warning Screen

Home Screen

Adjusting the Backlight

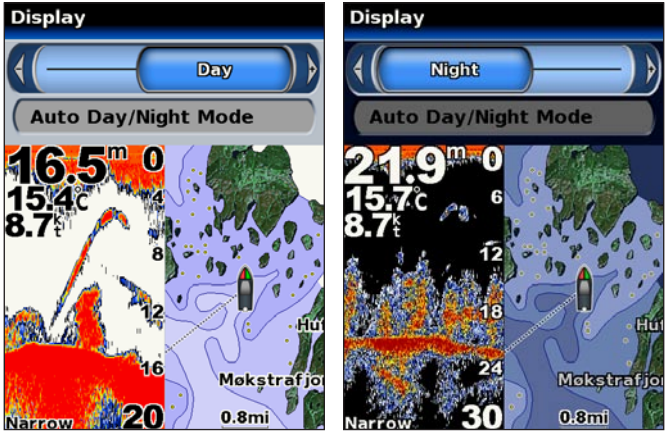
1. Press and release the **POWER** key.
2. Select **Backlight** > **Manual Backlight**.



*Press left or right on the **ROCKER** to manually adjust the backlight.*

To switch between Day and Night mode:

1. Press and release the **POWER** key.
2. Select **Day/Night Mode**.
3. Press left or right on the **ROCKER** to switch between modes.



Using the Keypad

POWER/BACKLIGHT—Press and hold to turn the unit on or off; press and release to adjust the backlight and day/night modes.

RANGE (-/+)—Press to adjust the range of the sonar; zoom in or out on a chart.

ROCKER—Press up, down, left, or right to move through menus, highlight fields, and enter data.

MARK—Press to mark a waypoint.

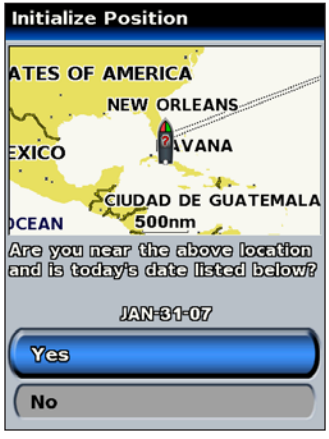
SELECT—Press to select highlighted items and confirm on-screen messages.

HOME—Press to return to the Home screen.

MENU—Press to access additional settings and configuration options; press to return to the previous screen when indicated.

Acquiring GPS Satellite Signals

When you turn on the unit, the GPS receiver must collect satellite data and establish its current location. If the unit cannot establish a location, the Initialize Position screen appears.



When the unit acquires satellite signals, the signal strength bars at the top of the Home screen are green . When the unit loses satellite signals, the green bars disappear .

For more information about GPS, visit the Garmin Web site at www.garmin.com/aboutGPS.

Using Simulator Mode

Simulator Mode turns the GPS receiver off for use indoors or for practice. The unit does not track satellites in Simulator Mode.

CAUTION: Do not try to navigate using Simulator Mode because the GPS receiver is turned off. Any satellite signal strength bars shown are only simulations and do not represent the strength of actual satellite signals.

To turn on Simulator Mode

1. From the Home screen select **Configure** > **System** > **Simulator**.
2. Select **Setup** to set speed, track control, and position.

Restoring Factory Settings

You can restore your unit to the original factory settings.

CAUTION: This procedure deletes any information you have entered.

To restore factory settings:

1. From the Home screen, select **Configure** > **System** > **System Information.**
2. Select **Factory Settings**.
3. Select **Yes** to restore all factory settings. Otherwise, select **No** to cancel.

Viewing System Information

You can view your unit's software version, basemap version, and unit ID number. You may need this information to update the system software or purchase additional map data information.

From the Home screen, select **Configure** > **System** > **System Information**.

Inserting and Removing SD Cards

Your unit supports Secure Digital (SD) cards. Insert optional BlueChart® g2 Vision™ SD cards to view high-resolution satellite imagery, and aerial reference photos of ports, harbors, marinas and other points of interest. Insert blank SD cards to transfer data such as waypoints, routes, and tracks to another compatible Garmin unit or a PC. The SD card slot is located on the bottom-right corner of the unit.

To insert the SD card, press it in until it clicks.

To remove the SD card, press in on the SD card. The card pops out.

Understanding the Home Screen

Use he Home screen to access all other screens.

NOTE: Options on this screen vary based on the unit type.

- **Charts**—access Navigation, Fishing, Mariner's Eye 3D, and Fish Eye 3D charts (page 7).

NOTE: On the GPSMAP 520/520s, 540/540s, 525/525s, and 545/545s units, you must insert an optional preprogrammed BlueChart® g2 Vision™ SD card to access the Fishing and Fish Eye 3D charts.

NOTE: The GPSMAP 530/530s, and 535/535s can use the Fish Eye 3D (on certain lakes) without additional cards. These units do not use the Fishing chart.

- **Sonar**—access sonar information (page 35).

NOTE: This option is available only if you have a unit with a built-in sounder or a Garmin sonar module connected.

- **Chart/Sonar**—set up the screen to view a chart and sonar in a split screen (page 18).
- **Where To?**—access navigation features (page 19).
- **Information**—view information including tides, currents, celestial data, user data, and information about other boats (page 25).
- **Configure**—access unit and system settings (page 29).

Using Charts

Your unit has a worldwide imagery map, a built-in detailed map of US inland lakes, or BlueChart g2 cartography for either the US shoreline or a specific country.

- **Navigation Chart**—displays all relevant navigation data available on your preloaded maps, including buoys, lights, cables, depth soundings, marinas, and tide stations in an overhead view.
- **Mariner's Eye 3D**—a bird's eye view from above and behind your boat; for a visual navigation aid.

NOTE: If you are using a GPSMAP 520/520s or 525/525s, you must insert an optional BlueChart g2 Vision preprogrammed SD card to view detailed Navigation and Mariner's Eye 3D charts.

Fishing Charts and Fish Eye 3D views are available when using optional Blue Chart® g2 Vision™ preprogrammed SD cards.

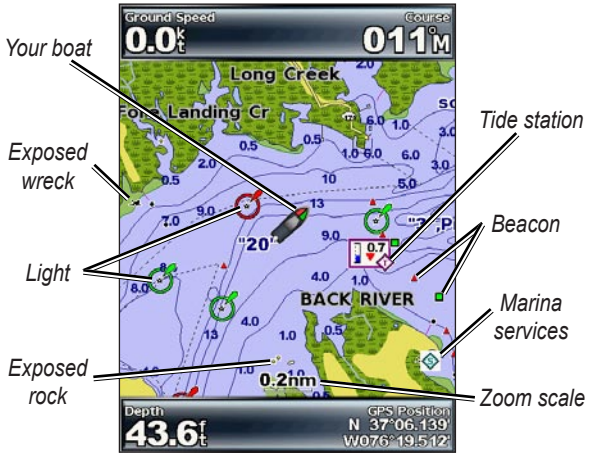
- **Fishing Chart**—removes navigational data from the preloaded map, while leaving the bottom contours and depth soundings. (This is not available on the 530/530s and 535/535s - all contour lines and depth soundings appear on the Navigation chart.)
- **Fish Eye 3D**—an underwater view that visually represents the sea floor or lake bottom according to the chart's information. (This is available for select lakes on 530/530s and 535/535s units without an additional card).

Using the Navigation Chart

Use the navigation chart to plan your course, view map information, and as a navigational aid.

NOTE: For GPSMAP 520/525 units, you must insert an optional BlueChart g2 Vision preprogrammed SD card for your region to view detailed navigation charts.

To access a navigation chart, from the Home screen, select **Charts** > **Navigation Chart**.

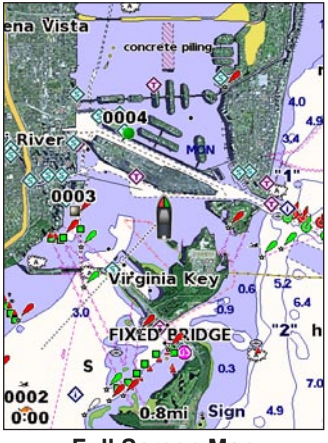


Navigation Chart with g2 Vision

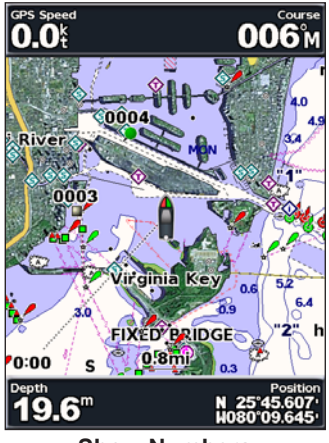
Navigation Chart Settings

To access additional settings or options for the navigation chart, press **MENU**.

Full Screen Map (Show Numbers)—view the navigation or fishing chart in full-screen mode, without numbers. Select **Show Numbers** to view numbers again.



Full Screen Map



Show Numbers

NEXRAD—turn NEXRAD weather data on or off.

NOTE: You must plug the optional GXM 31 antenna into the XM port on the back of the unit and have a subscription to XM Satellite WX Weather to view NEXRAD data. XM is not available on the GPSMAP 520/520s, 525/525s, 550/550s, or 555/555s units. For more information on XM WX Weather, see the *GXM 31 Owner's Manual*.

Overlay Numbers—show or hide cruising, sailing, navigation, and fishing numbers on the navigation or fishing chart.

Chart Setup—customize the navigation chart. See page 16.

Chart Notes—access detailed chart information.

Understanding Chart Data

BlueChart g2 Vision and the US inland lake electronic charts use graphic symbols to denote map features. Some common symbols you might see include, but are not limited to, the following*:

- Dangerous Rock
- Pilot Boarding Area
- Anchorage Berth
- Anchoring Prohibited
- Exposed Wreck
- Fishing Harbor
- Fishing Prohibited
- Information
- Current Station
- Exposed Rock
- Airport/Seaplane Base
- Precautionary Area
- Radio Report Point
- Recommended Anchorage
- Rescue Station
- Tide Station
- Yacht Harbor
- Marine Services
- Beacon
- Buoy
- Church

*Some symbols might appear differently on your Garmin unit.

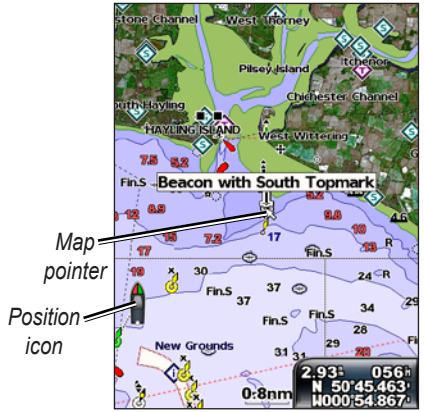
Other features common to most charts include depth contour lines (with deep water represented in white), intertidal zones, spot soundings (as depicted on the original paper chart), navigational aids and symbols, and obstructions and cable areas.

Panning the Navigation Chart

Use the map pointer ( ) to pan away from your current location, and scroll to other areas on the navigation chart. As you pan past the edge of the current map display, the screen scrolls forward to provide continuous map coverage. The position icon ( ) stays at your present location.

As you move the map pointer, you can view the distance and bearing from your current location, and the map pointer's location coordinates in the lower-right corner of the map.

To pan the map, press up, down, right, or left on the **ROCKER**.



To stop panning, press **MENU**, and then select **Stop Panning**.

Zooming In and Out on the Map

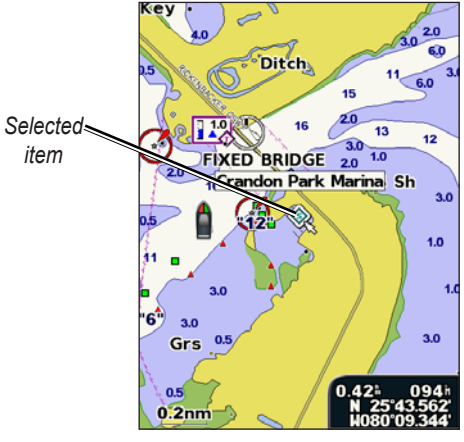
The **Range (+/-)** keys control the zoom level, indicated by the scale at the bottom of the navigation chart (**500ft**). The bar under the number represents that distance on the map.

Accessing Additional Object Information

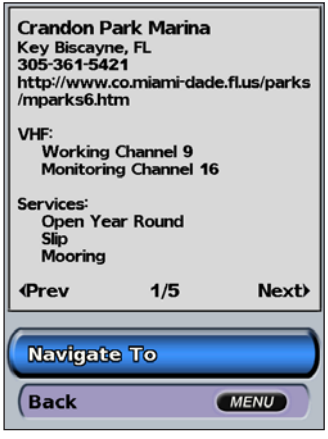
Use the map pointer ( ) to view information about on-screen map items and waypoints.

To access additional object information:

1. On the navigation chart, highlight an item with the map pointer, and press **SELECT**.



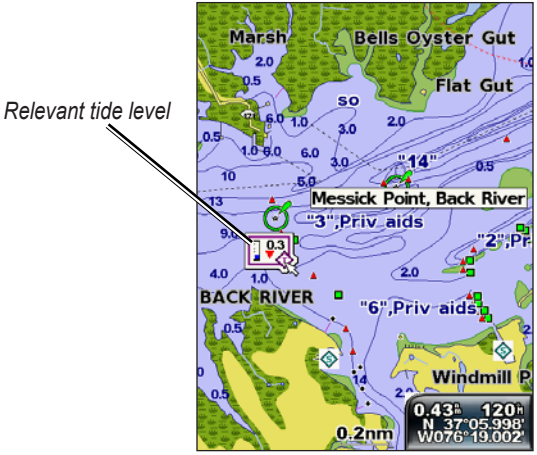
2. Select the item. If more than one item is in the area, select **Review**, and then select the item.



Viewing Tide Station Information

Tide station information appears on the chart with a detailed icon showing the relevant tide level. You can view an in-depth graph for a tide station to help predict the tide level at different times or different days.

Use the map pointer ( ) to highlight a tide station icon ( ), and press **SELECT**.



For more information about tides, see page 26.

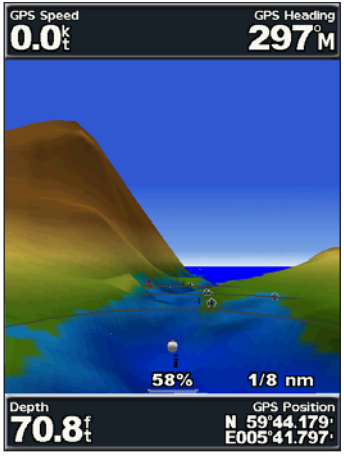
Using BlueChart g2 Vision

Optional BlueChart g2 Vision preprogrammed SD cards allow you to get the most out of your unit. In addition to detailed marine charting, BlueChart g2 Vision has the following features:

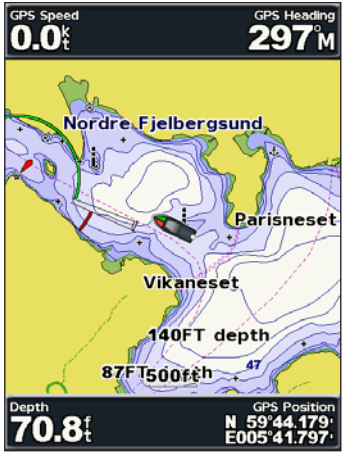
- **Mariner's Eye 3D**—a bird's eye view from above and behind the boat, for a more visual navigation aid. The BlueChart g2 Vision Mariner's Eye 3D is more detailed than the preloaded data.
- **Fish Eye 3D**—an underwater view that visually represents the sea floor according to the chart's information.
- **Fishing Charts**—view the chart without navigational data, leaving only the bottom contours and depth soundings. This chart works best for offshore deep-sea fishing.
- **High Resolution Satellite Imagery**—high resolution satellite images are provided for a realistic view of the land and water on the Navigation chart.
- **Aerial Photos**—view marinas and other navigationally significant aerial photos to help you visualize your surroundings.
- **Detailed Roads and POI data**—view roads, restaurants, and other points of interest (POIs) along the shore.
- **Current Data**—view current station information.
- **Auto Guidance**—automatic passage planning software that helps you determine the best course to your destination.

Using Mariner's Eye 3D

Mariner's Eye 3D provides a bird's eye view from above and behind the boat (according to your course), and provides a visual navigation aid. This view is helpful when navigating tricky shoals, reefs, bridges, or channels, and is beneficial when trying to identify entry and exit routes in unfamiliar harbors or anchorages.



Mariner's Eye 3D



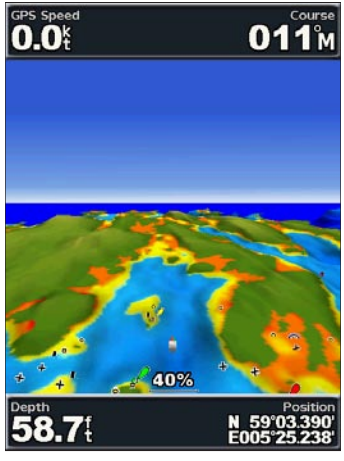
Navigation Chart

The **RANGE (+)** key moves the view closer to your boat and lower to the water, while the **RANGE (-)** key moves the view away from the boat. This is indicated by the scale (58%) at the bottom of the screen.

Mariner's Eye 3D Settings

To access additional settings or options from the Mariner's Eye 3D screen, press **MENU**.

Colors—choose between **Normal** (Default), **Water Hazard**, and **All Hazard**. The **Normal** setting highlights the land as you would see it from the water. The **Hazard** settings indicates shallow water and land with a color scale. Blue indicates deep water, yellow is shallow water, and red is very shallow. The **Water Hazard** setting indicates land in green, and the **All Hazard** setting shows land as dark red.



Mariner's Eye 3D (Water Hazard Colors)

Rings—toggle the range rings on or off.

Safe Depth—adjust the depth at which red indicates shallow water.

Nav Lane Width—adjust the width of the course line drawn when navigating.

Numbers—show or hide cruising, navigation, fishing, and sailing numbers.

Using Fish Eye 3D

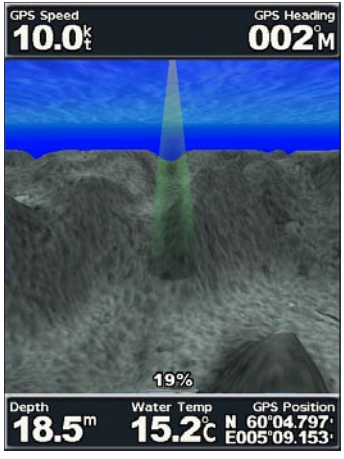
Using the depth contour lines of the BlueChart g2 Vision cartography, Fish Eye 3D provides an underwater view of the sea floor or lake bottom. The **RANGE** keys adjust the view in the same way as the Mariner's Eye 3D.

Fish Eye 3D Settings

To access additional settings or options for the Fish Eye 3D, screen, press **MENU**.

Sonar Cone—turn a cone on or off that shows the area covered by your transducer.

Sonar Data—visually show the sonar readings received by your transducer for the best combination of sonar and mapping. The setting is either on or off.



Fish Eye 3D

Tracks—turn the track log on or off.

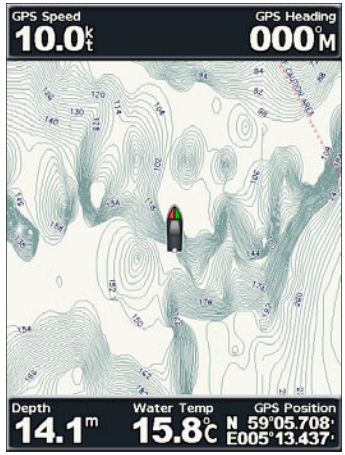
Numbers—show or hide cruising, navigation, or fishing numbers on the chart.

Using Fishing Charts

Use the Fishing chart for a detailed, unobstructed view of the bottom contours and depth soundings on the chart.

The Fishing chart uses detailed bathymetric data on on a preprogrammed BlueChart g2 Vision SD card, and is best for offshore deep-sea fishing.

To view the Fishing chart, from the Home screen select **Charts > Fishing Chart**.



NOTE: You need an optional preprogrammed BlueChart g2 Vision SD card for your region to view detailed fishing charts.

NOTE: Because the detailed bathymetric information used by the Fishing Chart is recorded specifically for off-shore applications, the Fishing Chart is not available on the GPSMAP 530/530s or 535/535s (inland) units.

Enabling High Resolution Satellite Imagery

You can overlay high-resolution satellite images on the land, sea, or both portions of the Navigation chart when using a preprogrammed BlueChart g2 Vision SD card.

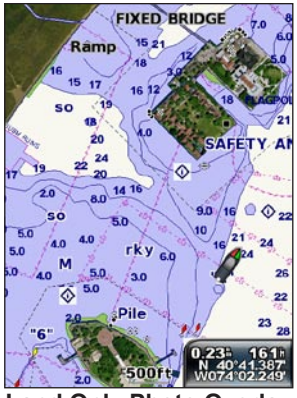
NOTE: This feature is preloaded on the GPSMAP 530/530s and 535/535s units. You do not need an additional SD card.

To enable satellite imagery:

1. While viewing the **Navigation Chart**, press **MENU**.
2. Select **Chart Setup** > **Appearance** > **Photos**.
3. Select one of the following:
   - **Off**—standard chart information is shown on the map.
   - **Land Only**—standard chart information is shown on water with photos overlaying the land.
   - **On**—photos overlay both the water and the land at a specified opacity. The higher you set the percentage, the more the satellite photos will cover both land and water.

NOTE: When enabled, the high resolution satellite images are only present at lower zoom levels. If you cannot see the high resolution images in your BlueChart g2 Vision region, either zoom in further using the **RANGE (+)** key, or set the detail level higher (see page 17).

Photo Overlay Off



Land Only Photo Overlay

Photo Overlay at 50%

Photo Overlay at 100%

Viewing Aerial Photos

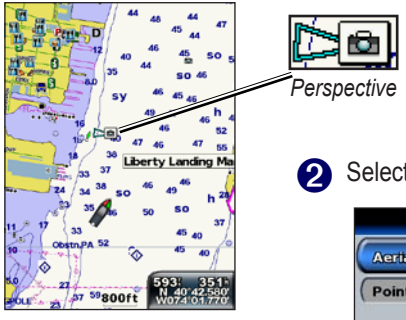
Preprogrammed BlueChart g2 Vision SD cards contain aerial photographs of many landmarks, marinas, and harbors. Use these photos to help orient yourself to your surroundings or to help acquaint yourself with a marina or harbor prior to arrival.

Aerial Photo

NOTE: Use the RANGE (+/-) keys to zoom in and out while viewing the aerial photo on the full screen.

To access aerial photos from the navigation chart:

1. Use the **ROCKER** to highlight a camera with the pointer.



2. Select **Aerial Photo**.

3. Select **View Fullscreen**.

Viewing Current Station Information

If current stations are available in your g2 Vision region, they appear on the navigation chart as a highlighted arrow. This detailed icon shows the current's speed and direction at a glance.

Current Station icon

Detailed Road and POI Data

BlueChart g2 Vision contains detailed road and POI data, which includes highly detailed coastal roads and points of interest (POIs) such as restaurants, lodging, local attractions and more. For instructions on searching for and navigating to these POIs, see the "Where To?" section beginning on page 19.

Using Automatic Guidance

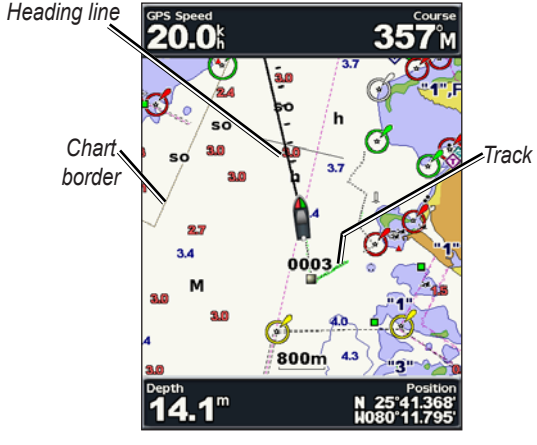
Automatic Guidance automatically creates and suggests passage based on available BlueChart g2 Vision chart information. See page 32 for instructions on setting up Automatic Guidance for your boat. The "Where To?" section on page 19 has more information on how to use Automatic Guidance.

Changing the Chart Settings

To change chart settings, from the Home screen, select **Charts** > **Chart Setup**.

Orientation—change the perspective of the map display:

- **North Up**—sets the top of the map display to a north heading.
- **Track Up**—sets the map display to the current track heading.
- **Course Up**—sets the map so the direction of navigation is always up and turns the course line vertical on the screen.



Heading Line—draws an extension from the bow of the boat in the direction of travel.

- **Off**—turn off the heading line.
- **Distance**—sets the distance to the end of the heading line.
- **Time**—sets the amount of time until you reach the end of the heading line.

Chart Borders—turn on chart borders if you load BlueChart g2 Vision maps and you want to see what areas the maps cover.

Tracks—hide (off) or show (on) tracks on the chart.

Appearance—customize how items are shown on the map.

Changing the Chart Appearance

From the Home screen, select **Charts** > **Chart Setup** > **Appearance**.

Detail—adjust the amount of detail shown on the map.

Photos—set the high resolution satellite images to on, off, or land only. (See page 14 for more information.)

Spot Depths—turn on spot soundings and set a dangerous depth.

Light Sectors—adjust the drawing of light sectors on the map.

Symbols—select the navaid symbol set (NOAA or IALA).

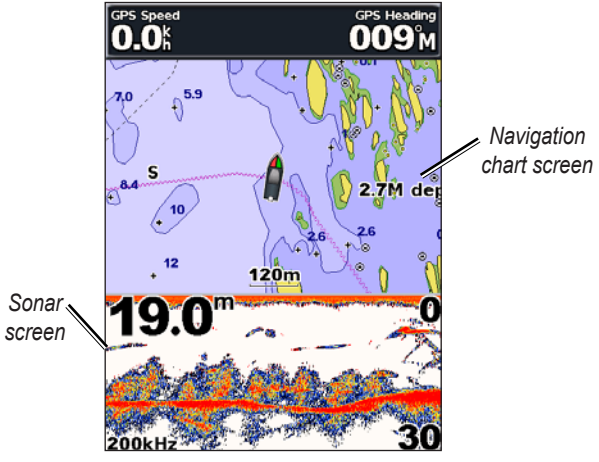
Symbol Size—adjust the size of the symbols shown on the map.

Using the Chart/Sonar Screen

Use the Chart/Sonar screen to view the Navigation Chart, Fishing Chart, Mariner's Eye 3D, or Fish Eye 3D and sonar at the same time.

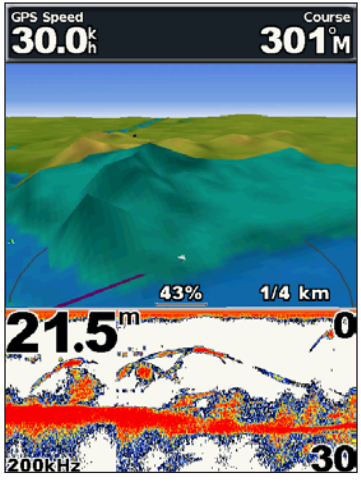
To view a split chart/sonar screen:

1. From the Home screen, select **Chart/Sonar**
2. Select the type of chart on the split screen.



Navigation/Sonar Combination

To access additional settings or options for the chart/sonar screen, press **MENU**.



Mariner's Eye 3D/Sonar

NOTE: The **Chart/Sonar** screen, like the **Sonar** screen, is only available when using a sonar capable unit with a transducer attached.

WHERE TO?

Use the **Where To?** option on the Home screen to search for, and navigate to, nearby fuel, repairs, marinas, ramps, waypoints, and routes.

NOTE: You have to create waypoints and routes before you can navigate to them.

You can navigate to a destination using one of three methods: Go To, Route To, or Guide To.

- **Go To**—takes you directly to the destination.
- **Route To**—creates a route from your location to a destination, allowing you to add turns to the route.
- **Guide To**—searches BlueChart g2 Vision chart data to suggest the best path to your destination.

CAUTION: Guide To does not assure obstacle and bottom clearance. For safety, always resolve any discrepancies or questions before continuing navigation.

Navigating to a Destination

You can search for, and navigate to, nearby destinations including fuel, repairs, marinas, waypoints, and routes.

To begin navigating:

1. From the Home screen, select **Where To?**
2. Select the marine service category to which you want to navigate. The unit shows the list of the 50 nearest locations and the distance to each.

"Where To?" Categories

Nearest "Fuel" Search Results

3. Select the marine service item to which you want to navigate. A screen containing information about the selected marine service appears.
4. Select **Navigate To**.
5. Select **Go To** or **Route To**.

   OR

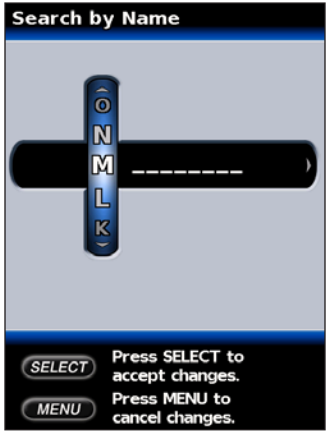
   Select **Guide To** when using a preprogrammed BlueChart g2 Vision card to use Auto Guidance.
6. Follow the colored line on the screen to the destination.

To stop navigating:

Press **MENU**, and then select **Stop Navigating**.

To search for a destination by name:

1. From the Home screen, select **Where To?** > **Search by Name**.
2. Press up or down on the **ROCKER** to select a number or character; press left or right to move fields.
3. Press **SELECT** to view the 50 nearest destinations that contain your search criteria.



Creating and Using Waypoints

You can store up to 1,500 alphanumeric waypoints with a user-defined name, symbol, depth, and water temp for each waypoint.

When you create a waypoint, you can designate it as an MOB (Man OverBoard). This marks the point and sets a course back to the marked location. When an MOB is active, an MOB waypoint with an international MOB symbol is created and the unit is on an active navigation to that point.

To mark your location:

1. From any screen, press **MARK**.
2. Select **Back** to return to the chart, or select **MOB** to designate the waypoint as an MOB point.

NOTE: Pressing the **MARK** key only creates a waypoint at your present location.

To create a new waypoint:

1. Move the map pointer to the location you want, and press **SELECT**.
2. Select **Create Waypoint**.

3. Select one of the following:
   - **Edit Waypoint**—customize the waypoint attributes.
   - **Delete**—delete the waypoint.
   - **Navigate To**—go to the waypoint.
   - **Back**—return to the navigation chart.

To edit a waypoint:

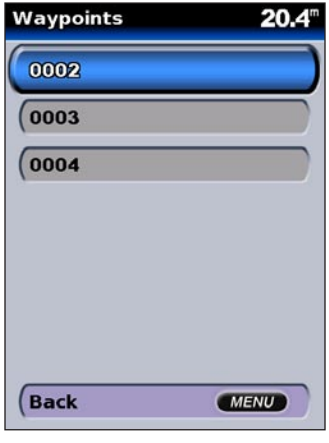
1. Create a new waypoint or select a waypoint on the navigation chart.
2. Select **Edit Waypoint**.
3. Select the waypoint attribute you want to change (**Name**, **Symbol**, **Depth**, **Water Temp**, or **Position**).

To move the waypoint on the navigation chart:

1. Select **Edit Waypoint** > **Position** > **Use Chart**.
2. Use the **ROCKER** to move the waypoint to a different location, and press **SELECT**.

To view a list of all waypoints:

From the Home screen, select **Information** > **User Data** > **Waypoints**.

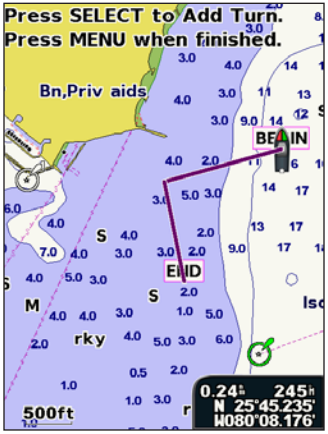


Creating and Using Routes

You can create and store up to 20 routes, with up to 250 waypoints each.

To create a route from your present location:

1. Move the map pointer to a destination, and press **SELECT**.
2. Select **Navigate To** > **Route To**.

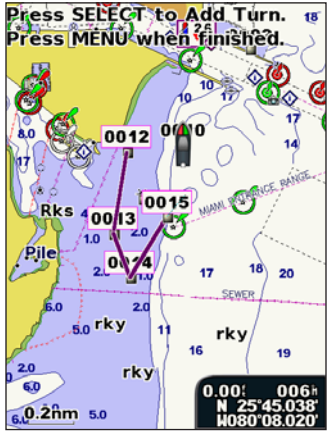


Adding a Turn to a Route

3. Use the **ROCKER** to add a turn, and press **SELECT**. Repeat this step to add additional turns.
4. Press **MENU** to cancel or to begin navigating the route.

To create a route in another location:

1. From the Home screen, select **Information** > **User Data** > **Routes** > **New Route**.



Creating a New Route

2. Use the **ROCKER** to select the route's starting point, and press **SELECT**.
3. Use the **ROCKER** and **SELECT** keys to add additional turns.
4. Press **MENU** to cancel, edit, or navigate the route.

To edit a route

1. From the Home screen, select **Information** > **User Data** > **Routes**.
2. Select the route to edit.

3. Select **Edit Route**. You can edit the route name, turns, or delete the route.

To delete a route:

1. From the Home screen, select **Information** > **User Data** > **Routes**.
2. Select the route to delete, and then select **Edit Route**.
3. Select **Delete**.

Viewing Information

Use the Information screen to access information about user data, tides, currents, celestial data, and other boats.

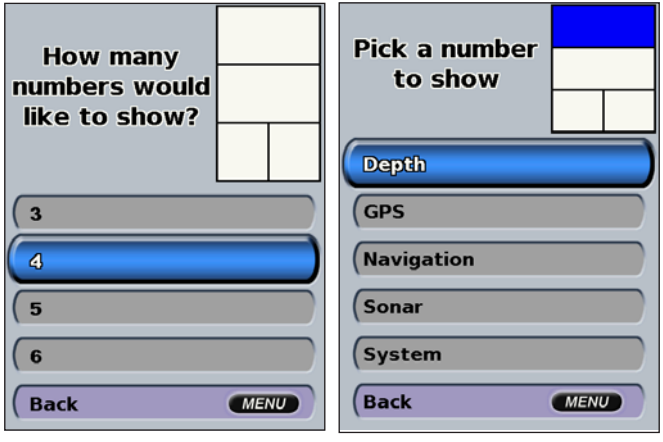
Viewing Numbers

You can view and customize numerical data including depth, GPS information, and navigation information. You can customize the number of fields shown and the type of information shown in each field. You can display up to six fields of numerical information.

To view the numbers screen, from the Home screen, select **Information** > **Numbers**.

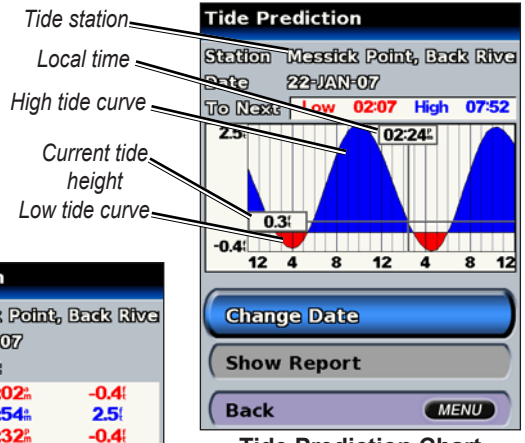
To customize the number screen:

1. From the Home screen, select **Information** > **Numbers**.
2. Press **Menu**, and then press **SELECT**.
3. Select the number of fields to show (**3**, **4**, **5**, or **6**).
4. Select information to show in each field.

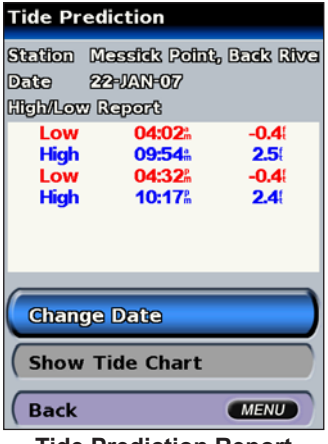


Viewing Tide Station Information

To view tide information, select **Tides** from the Information screen, then select a tide station from the list.



Tide Prediction Chart



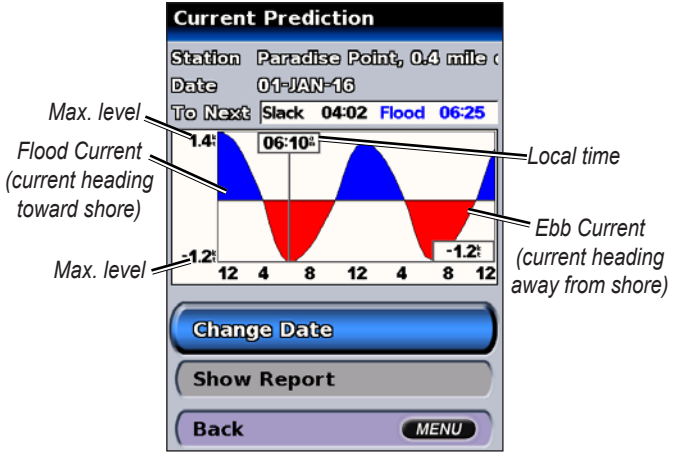
Tide Prediction Report

- To view the Tide Prediction Report, select **Show Report**.
- To return to the Tide Prediction Chart, select **Show Tide Chart**.

Viewing Current Information

Use the Current Prediction screen to view information for currents.

To view current prediction information, select **Currents** from the Information screen, then select a Current Station from the list.

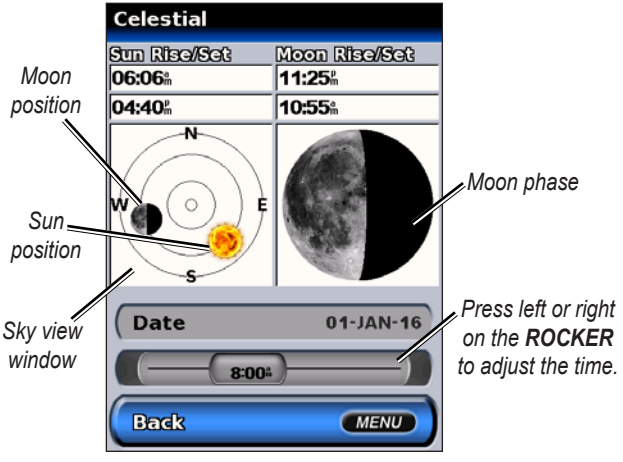


NOTE: You can select both tide and current station information directly from the Navigation chart. See pages 11 and 16 for more information.

Viewing Celestial Information

Use the Celestial screen to view celestial data for sun and moon rise/set, moon phase, and approximate sky view location of the sun and moon.

To view celestial information, on the Information screen, select **Celestial**.



Viewing User Data

To view user data, from the Home screen, select **Information** > **User Data**.

Waypoints—view a list of all saved waypoints.

Routes—view a list of saved routes.

Tracks—view a list of saved tracks.

Data Transfer—transfer waypoints, routes, and tracks to and from an SD card.

Clear User Data—erase all user waypoints, routes, and tracks.

To transfer data to or from an SD card:

1. Insert an SD card into the SD card slot on the front of the unit.
2. From the Home screen, select **Information** > **User Data** > **Data Transfer**.
3. Complete one of the following:
   - Select **Save To Card** to save waypoints, routes, and tracks to the SD card.
   - Select **Merge From Card** to transfer data from the SD card to the unit and combine it with existing GPS data.
   - Select **Replace From Card** to overwrite items on your unit.

Viewing Other Boats

To view information about other boats, from the Home screen, select **Information** > **Other Boats**.

NOTE: To view information about other boats, your unit must be connected to an external AIS (Automatic Identification System) or DSC (Digital Selective Calling) device. See page 30 for more information.

AIS List—view information about all of the boats your unit is monitoring. The AIS list shows the MMSIs or (if the boat is broadcasting it) names of the AIS boats, and is sorted by range. The boat nearest to your boat appears at the top of the list.

DSC Log—view a list of all DSC calls, sorted by most recent, sender, or by type (distress calls or position reports).

- **View Most Recent**—view the seven most recent DSC calls received, sorted and displayed chronologically by time and date. Calls with identical time and date information show the same information in the list.
- **View By Sender**—view an alphanumerical list of senders.
- **View By Type**—view the seven most recent distress calls or position reports, sorted chronologically.

DSC Call List—view the 100 most recent calls. The DSC Call List shows the most recent call from a boat. If a second call is received from the same boat, it replaces the first call in the Call List.

Directory—view a list of all DSC entries. You can view by name or by MMSI. You can also add an entry.

Setup—turn AIS and DSC on or off and set a safe zone for your boat.

Configuring the Unit

Use the Configure screen to configure unit settings.

Configuring System Settings

To change general system settings, from the Home screen, select **Configure** > **System**.

Simulator—turn Simulator Mode on or off and set Simulator Mode options. (If you set the unit into a Store Demonstration mode during the initial unit setup, this setting will be named **Demo.**)

Language—select the on-screen language.

Beeper/Display—select **Beeper** to set when the unit makes audible sounds. The three settings are **Off**, **Alarms Only** (default), and **On** (keys and alarms). Select **Display** to switch between Day or Night modes and brighten or darken the backlight.

GPS—view GPS satellites, turn WAAS/EGNOS on or off, and initialize the GPS receiver.

System Information—view system information and restore factory settings.

Event Log—shows a list of system events.

Overlay Numbers—set the styles for Wind and Next Turn numbers.

Changing Units of Measure

To change units of measure, from the Home screen, select **Configure** > **Units**.

System Units—this is a quick global setting that defines most of the individual units of measure listed below at once. **Statute (mh, ft, ºF)**, **Metric (kh, m, ºC)**, or **Nautical (kt, ft, ºF)**.

Depth—individually set the units of measure for depth to **Feet (ft)**, **Fathoms (fa)**, or **Meters (m)**.

Temperature—individually set units of measure for temperature to **Fahrenheit (ºF)** or **Celsius (ºC)**.

NOTE: You must be receiving NMEA Sonar depth data or using a Garmin sounder module to view depth and temperature information.

Dist, Spd, Elev—individually set the units of measure for distance, speed, and elevation readings.

Heading—set the reference used in calculating heading information.

Position—change the coordinate system in which a given location reading appears. The default format is **hddd°mm.mmm'**. Only change the position format if you are using a map or chart that specifies a different position format.

Time—set the time format (**12 hour**, **24 hour,** or **UTC** time format), time zone, and indicate whether to use daylight saving time.

Configuring Communications Settings

To change the communications settings, from the Home screen, select **Configure** > **Communications**.

Serial Port 1/Serial Port 2—select the input/output format to use when connecting your unit to external NMEA devices, a personal computer, or other Garmin devices.

- **Garmin Data Transfer**—the proprietary format used to upload, download, or exchange data with a computer or another Garmin unit.
- **Garmin Remote Sonar**—allows you to connect a Garmin GSD 21 or GSD 22 serially.
- **NMEA In/NMEA Out**—supports the input or output of standard NMEA 0183 data, DSC, and sonar NMEA input support for the DPT, MTW, and VHW sentences.
- **NMEA High Speed**—supports the input or output of standard 0183 data for most AIS receivers.
- **None**—provides no interfacing capabilities.

NMEA Setup—enable or disable NMEA output sentences for sounder, route, system, and Garmin NMEA settings.

To enable or disable NMEA output sentences:

1. From the Home screen, select **Configure** > **Communications** > **NMEA Setup**.
2. Select a setting (**Sounder**, **Route**, **System**, or **Garmin**).
3. Select a NMEA output sentence.

4. Select **Off** to disable, or select **On** to enable the NMEA output sentence.

Posn. Precision—adjust the number of digits (**Two Digits**, **Three Digits**, or **Four Digits**) to the right of the decimal point for transmission of NMEA output.

Waypoint—select how the unit outputs waypoint identifiers (**Names** or **Numbers**).